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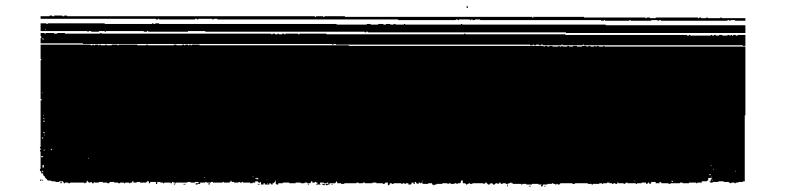
Solid Waste



Solid Waste Disposal in the United States

Volume II

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3.9 CONSTRUCTION AND DEMOLITION WASTE

Characteristics of Construction and Demolition Waste

Solid waste from construction and demolition of structures includes mixed lumber, roofing and sheeting scraps, broken concrete, asphalt, brick, stone, plaster, wallboard, glass, piping, and other building materials. The exact nature of construction and demolition waste depends upon the type of structures involved, and varies with geographical location and the age and size of a community.

Quantities of Construction and Demolition Waste

The quantities of demolition and construction waste reported in various locations across the nation range from 0.12 to 3.52 pounds per capita per daý (pcd). An urban average of 0.72 pcd was reported from 1970 data. An Acalifornia study reported 0.27 pcd for communities with fewer than 10,000 people, 0.68 pcd for communities of between 10,000 and 100,000 people, and 1.37 pcd in communities of over 100,000 people. A study of waste generation in the Kansas City area estimated quantities of demolition and construction wastes at about 0.6 pcd. At an average of 0.72 pcd, the total quantity of construction and demolition waste generated in the United States is estimated at approximately 31.5 million tons per year. This is about 22 percent as much as the municipal solid waste disposed of in 1986. L2

Management Practices for Construction and Demolition Waste

Management options for construction and demolition waste include recycling, reclaiming, or direct disposal in municipal, industrial, and demolition debris landfills and waste piles. However, the fraction of construction and demolition waste received at any of these facilities is unknown. Since most of this waste is generally viewed as requiring less stringent disposal than MSW, special demolition debris landfills are often used.¹

3.10 AGRICULTURAL WASTE

Agricultural waste includes animal wastes from feedlots and farms, crop production wastes, irrigation wastes, and collected field run-off. Irrigation return flows and agricultural wastes, such as manures and crop residues that are returned to the soil as fertilizers or soil conditioners, are exempt from regulation under RCRA.

A total of 2.0 billion tons of wet manure are produced each year from livestock on American farms.⁵² The portion of this waste regulated by RCRA (i.e., that is <u>not</u> returned to the soil) is not known. Other constituents found in these wastes, especially from feedlots and barnyards, are nutrients, organic matter, ammonia, fecal bacteria, and other microorganisms. Crop production wastes, irrigation wastes, and collected field run-off have not been well characterized. The total volume of these wastes produced annually is unknown.

Information on agricultural SIs has been collected in The Surface Impoundment Assessment National Report. 53 The objective of this study was to identify all existing SIs. The study counted agricultural SIs and categorized them by the type of agricultural production facility. A total of 19,437 agricultural SIs were identified by this survey, 270 of which were classified as abandoned SIs. Because the study relied on secondary sources of data such as United States Geological Survey maps, permit files, and well drillers' reports, the number of agricultural SIs reported may be low. Actual volumes of waste placed in the agricultural SIs were not reported. The number of SIs located, broken down by facility type, is presented in Table 3-10.

Table 3-10. DISTRIBUTION OF SURFACE IMPOUNDMENTS BY AGRICULTURAL PRODUCTION FACILITY

Agricultural Production Facility	Number of SIs Located ^a	
Dairy farms	4,732	
Hogs	3,492	
Cattle feedlot	2,974	
General farms	1,208	
Poultry farms	717	
Other fur-bearing animals	336	
Crop production	190	
Fish hatcheries	95	

SOURCE: Reference 53.

The Subtitle O census reported a total of 17,159 active agricultural SIs. Fewer States provided estimates of numbers of SIs for the Subtitle D census as compared to the national SI Assessment. The Subtitle D census also reported that 93 percent of all agricultural SIs receive 50,000 or fewer gallons of agricultural waste per day. Assuming that the average agricultural SI receives less than 50,000 gallons per day, EPA estimates that 1 billion gallons per day is an upper limit to the amount of agricultural waste disposed of in SIs.

The States of Louisiana and Nevada are not included in this inventory.